

COMPRESSOR AND MAGNETIC CLUTCH

AC1SS-01

ON-VEHICLE INSPECTION

1. INSPECT COMPRESSOR FOR METALLIC SOUND

Check there is abnormal metallic sound from the compressor when the A/C switch is ON.

If abnormal metallic sound is heard, replace the compressor assembly.

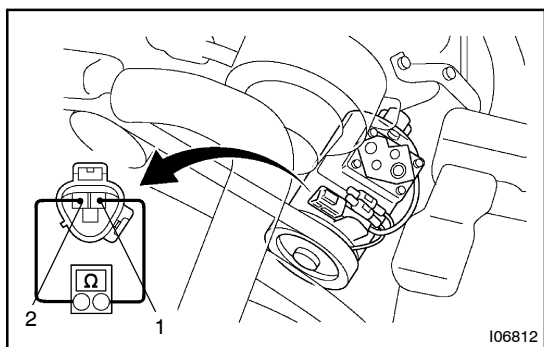
2. INSPECT REFRIGERANT PRESSURE

(See page AC-3)

3. INSPECT VISUALLY FOR LEAKAGE OF REFRIGERANT

Using a gas leak detector, check for leakage of refrigerant.

If there is any leakage, replace the compressor assembly.



4. 2UZ-FE Engine Models:

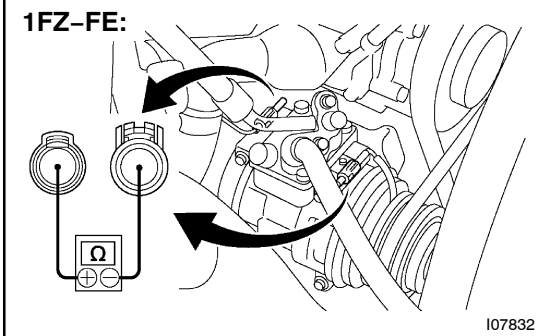
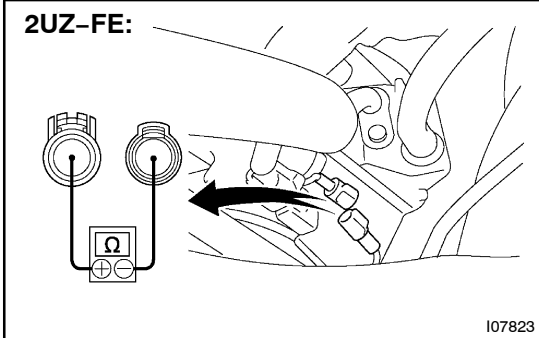
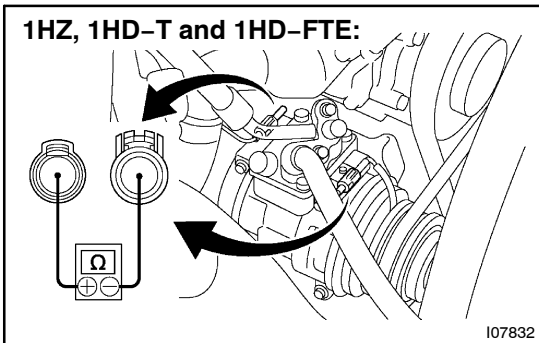
INSPECT COMPRESSOR LOCK SENSOR RESISTANCE

- (a) Disconnect the connector.
- (b) Measure resistance between terminals 1 and 2.

Standard resistance:

570 – 1,050 Ω at 20°C (68 °F)

If resistance is not as specified, replace the compressor.

1FZ-FE:**2UZ-FE:****1HZ, 1HD-T and 1HD-FTE:****5. G.C.C. Countries:****INSPECT REFRIGERANT TEMPERATURE SENSOR**

- (a) Disconnect the connector.
- (b) Measure resistance between terminals.

Standard resistance:**Below 70 mΩ at 20 – 30 °C (68 – 86 °F)**

Except 2UZ-FE:

If resistance is not as specified, replace the discharge cover with the sensor.

2UZ-FE:

If resistance is not as specified, replace the rear housing with the sensor.

6. MAKE THESE VISUAL CHECKS:

- (a) Leakage of grease from the clutch bearing.
- (b) Signs of oil on the pressure plate or rotor.

7. INSPECT MAGNETIC CLUTCH BEARING FOR NOISE

- (a) Start engine.
- (b) Check for abnormal noise from the compressor when the A/C switch is OFF.

If abnormal noise is being emitted, replace the rotor of magnetic clutch.

8. INSPECT MAGNETIC CLUTCH OPERATION

- (a) Disconnect the connector.
 - (b) Connect the positive (+) lead from the battery to terminal on the magnetic clutch connector and the negative (-) lead to the body ground.
 - (c) Check that the magnetic clutch is energized.
- If operation is not as specified, replace the magnetic clutch.

